

Six climate change-related events in the United States accounted for about \$14 billion in lost lives and health costs

Author(s): Knowlton K, Rotkin-Ellman M, Geballe L, Max W, Solomon GM

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Abstract:

The future health costs associated with predicted climate change-related events such as hurricanes, heat waves, and floods are projected to be enormous. This article estimates the health costs associated with six climate change-related events that struck the United States between 2000 and 2009. The six case studies came from categories of climate change-related events projected to worsen with continued global warming-ozone pollution, heat waves, hurricanes, infectious disease outbreaks, river flooding, and wildfires. We estimate that the health costs exceeded \$14 billion, with 95 percent due to the value of lives lost prematurely. Actual health care costs were an estimated \$740 million. This reflects more than 760,000 encounters with the health care system. Our analysis provides scientists and policy makers with a methodology to use in estimating future health costs related to climate change and highlights the growing need for public health preparedness.

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Resource Description

Early Warning System: M

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

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Exposure: 🛚

weather or climate related pathway by which climate change affects health

Air Pollution, Extreme Weather Event, Precipitation, Sea Level Rise, Temperature

Air Pollution: Interaction with Temperature, Ozone, Other Air Pollution

Air Pollution (other): Smoke

Extreme Weather Event: Flooding, Hurricanes/Cyclones, Wildfires

Temperature: Extreme Heat, Fluctuations

Geographic Feature: M

resource focuses on specific type of geography

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None or Unspecified Geographic Location: M resource focuses on specific location **United States** Health Impact: M specification of health effect or disease related to climate change exposure Infectious Disease, Injury, Morbidity/Mortality, Respiratory Effect, Other Health Impact Infectious Disease: Vectorborne Disease Vectorborne Disease: Mosquito-borne Disease Mosquito-borne Disease: West Nile Virus Respiratory Effect: Asthma Other Health Impact: Hospitalizations; Emergency department visits; Outpatient visits; Heat stress Mitigation/Adaptation: **№** mitigation or adaptation strategy is a focus of resource Adaptation type of model used or methodology development is a focus of resource Cost/Economic Population of Concern: A focus of content Population of Concern: M populations at particular risk or vulnerability to climate change impacts Children, Elderly Other Vulnerable Population: Pre-existing medical conditions Resource Type: M format or standard characteristic of resource Research Article Timescale: M

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment: ☑

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

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